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Finanční analýza vybrané společnosti
Financial Analysis of a Selected Company

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2. Description of Financial Analysis
3. Characteristics of the Selected Company
4. Financial Analysis of the Selected Company
5. Conclusion

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List of Abbreviations
Declaration of Utilisation of Results from the Bachelor Thesis
List of Annexes
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References:

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The declaration

—Herewith I declare that I elaborated the entire thesis, including all annexes, independently.

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Chapter 1 Introduction

Financial analysis is the process of evaluating businesses, projects, budgets and other finance-related entities to determine their performance and suitability. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid or profitable enough to warrant a monetary investment. When looking at a specific company, a financial analyst conducts analysis by focusing on the income statement, balance sheet and cash flow statement.

The aim of this bachelor thesis is to analyze Sinopec Group. It would be analyzed through three methods:common size analysis, financial ratio analysis and DuPont analysis.

Sinopec Group is a large petroleum and petrochemical enterprise group established by the state in July 1998 and is a wholly state-owned company. Companies registered capital is 231.6 billion yuan, the head office established in Beijing. The company's main business areas include: industrial investment and investment management; oil and natural gas exploration, mining, storage and transportation (including pipeline transportation), sales and utilization; coal production, sales, storage and transportation; oil refining; refined oil storage, Transportation, wholesale and retail etc.

The thesis is divided into 5 chapters. The first chapter is introduction of the thesis. In chapter 2, financial analysis methodologies, such as financial statements, common-size analysis, financial ratio analysis and DuPont analysis are introduced. Chapter 3 is description of Sinopec Group It includes: The development of Sinopec Group, Corporate Culture of Sinopec Group, Industries, Company Size In chapter 4, We use these analytical methods to analyze its actual situation. In chapter5, Sinopec Group’s company status was concluded

Chapter 2. Description of Financial Analysis Methodology

In this part, the methods of financial analysis are introduced. In this thesis, three methods are used. They are common size analysis, financial ratio analysis and DuPont analysis. To use these methods, we need data from balance sheet, cash flow statement and income statement.
The description of this section is based on these books: GUAN (2013), LIU(2013).

2.1 Balance sheet

The balance sheet is an accounting statement that reflects all the assets, liabilities and owners' equity of a company on a specific date (such as the end of the month, the end of the quarter, or the end of the year) and is a static manifestation of the business activities of the enterprise. The basic formula is as follows,

$$total\ assets = total\ liabilities + total\ equity. \tag{2.1}$$

Obey the formula (2.1)， the balance sheet is divided into two parts: one is assets, the other one is liabilities and equity, Balance sheet not only allows companies to find their own problems, but also allow all readers to understand the company’s business situation in the shortest time.

Table 2.1: Example of balance sheet (Ning Lan Group in 2011)

ASSET		LIABILITIES	
CURRENT ASSETS		**CURRENT LIABILITIES**	
CASH	32,800	ACCOUNT PAYABLE	49,000
ACCOUNT RECEIVABLE	300	ACCRUED EXPENSES	450
PREPAID RENT	1,000	UNEARNED REVENUE	1,000
INVENTORY	39,800	TOTAL CURRENT LIABILITIES	50,450
TOTAL CURRENT ASSET	73,900	**LONG TERM LIABILITIES**	99,500
LONG TERM ASSET		TOTAL LIABILITIES	149,950
LEASEHOLD IMPROVEMENT	100,000	**OWNER’S EQUITY**	
ACCUMULATED DEPRECIATION	-2,000	RETAINED EARNINGS	11,950
TOTAL LONG-TERM ASSET	98,000	COMMON STOCK	10,000
TOTAL ASSET	171,900	TOTAL OWNER’S EQUITY	21,950
		TOTAL LIABILITIES AND OWNE’S EQUITY	171,900

Source: GUAN (2013， p57)

2.2 Cash flow statement

A cash flow statement is a financial statement that reflects the influence of business operations, investment activities, and financing activities on cash and cash equivalents within a certain period (such as monthly, quarterly, or annual). The cash flow statement is an alternative to the original statement of changes in financial status or the statement of capital flows. It shows the cash flow generated by the company's operations, investments and fundraising activities.

The cash flow statement provides the information about the health of a company. If a company's cash flow from operating activities cannot pay dividends and maintain the production ability, and thus it must use borrowing to meet these needs, this gives a warning that the company will not be able to maintain its normal situation in the long run. The cash flow statement reveals the company's internal development problems by showing the insufficiency of the cash flow generated in the operation

2.3 Income Statement

Income Statement is a financial statement that reflects the company's profits (or losses) on a certain period. The income statement can provide the reader relevant information to make a logical economic decision. It can be used to analyze the reasons for profit changes, changes in the company's operating costs, and to evaluate the value of investments.

Company's activities are often divided to two parts: Operating activities and Financing activities. We often calculate the difference between the sum of revenue and cost in these two activities. In Operating activities, we call operating profit before interest and tax as EBIT (earnings before interest and tax). Operating revenue includes revenues from sale of products, goods and service. Operating costs are the costs associated with generating operating revenue. Financial revenues include interest received, revenues from owned security. Financial costs are including interest paid, coupons paid, the basic formula is as follows,

$$net\ income/loss = revenue - costs(expenses), \tag{2.2}$$

$$gross\ profit\ /loss = net\ sales - cost\ of\ goods\ sold, \tag{2.3}$$

$$net\ sales = sales - sales\ returns\ and\ allowances, \tag{2.4}$$

$$\textit{cost of goods sold} = \textit{beginning inventory} + \textit{purchases} - \textit{purchase returns and allowances} + \textit{freight-out/delivery expense} - \textit{ending inventory}, \quad (2.5)$$

$$EBIT = \textit{net income} + \textit{interest} + \textit{taxes} = \textit{revenue} - \textit{operating expenses}, \quad (2.6)$$

$$EBT = EBIT - \textit{interest paid}, \quad (2.7)$$

$$EAT = EBT - \textit{tax paid}. \quad (2.8)$$

2.4 Common Size Analysis

Common size analysis means the analysis of the ratio of assets/liabilities/cost to total assets/liabilities/income. There are two type of common size analysis: vertical common size analysis and horizontal analysis.

Vertical analysis refers to the comparison of the data of each item in the table with the total in a financial statement. In this way, we can find out the position and importance of the item to the total.

The horizontal analysis method compares the information of the company's financial status during the reporting period with information that reflects the company's previous or financial status. In this way the development and changes of various operating performance or financial status of the company can be showed.

Horizontal analysis focuses on the comparison of key projects in different years. The vertical analysis method pays more attention to the internal structure analysis of each item in the report. All items in the income statement are expressed as a percentage of operating revenue, while items in the balance sheet are expressed as a percentage of total assets. In this way, the use of common size analysis can eliminate the incomparability of absolute amounts due to different company sizes.

2.5 Financial Ratio Analysis

The financial ratio analysis is based on the relationship between two or more items in the financial statements in the same period and calculates the ratio to evaluate the financial status and operating results of the company.

The financial ratio can be used to evaluate the change of investment’s return between years. It is also possible to compare different companies in a certain industry at a certain point in time. The analysis of financial ratios can eliminate the impact of scale and compare the returns and risks of different companies to help investors and creditors make rational decisions.

In general, the relationship between risk and return is measured in three dimensions: Profitability reflects the ability of the company to obtain profit, liquidity ratio measures company´s ability to meets its immediate or short-term liabilities and obligations, the solvency ability reflects the ability of an enterprise to repay its due debts

2.5.1 Profitability ratio

Profitability is the ability of a company to earn profits. In general, the company's profitability refers to normal business conditions. There are many indicators that reflect the company’s profitability, and the main ones that are commonly used are Return on assets, Return on equity, Operating profit margin, Net profit margin.

Return on assets

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. The basic formula is as follows,

$$return\ on\ asset = \frac{EBIT}{total\ assets} \cdot 100\%. \qquad (2.9)$$

Return on equity

The rate of return on equity, which is the ratio of after-tax profit to equity, is the average net profit per hundred dollars in the company's total equity. From the level of return on equity, one can observe the ability of the company to distribute dividends. If the return on equity is high in the current year, the dividends distributed by the company may high. Conversely, the return on equity is low. Its calculation formula is:

$$return\ on\ equity = \frac{EAT}{equity} \cdot 100\%. \qquad (2.10)$$

Operating profit margin

Operating profit margin refers to the ratio of operating profit to operating revenues of the company. It is a measure of the efficiency of the company's operations and reflects the ability of the company's managers to obtain profits through operations while considering operating costs. The calculation formula is:

$$operating\ profit\ margin = \frac{EBIT}{revenur} \cdot 100\%. \qquad (2.11)$$

Net profit margin

Net profit margin refers to the ratio of EAT to revenues. In general, the higher the net profit margin, the better. The higher the ratio, the stronger the company's profitability, but it is greatly affected by the characteristics of the industry, in the analysis should be combined with the specific circumstances of different industries for analysis. The basic formula is as follows,

$$net\ profit\ margin = \frac{EAT}{revenues} \cdot 100\%. \qquad (2.12)$$

2.5.2 Liquidity ratio

Liquidity Ratio measures company´s ability to meets its immediate or short-term liabilities and obligations. We often use the following three indicators to analyze it.

Current Ratio

Current Ratio refers to the ratio of current assets and current liabilities. It is an indicator reflecting the short-term solvency of the company. The basic formula is as follows,

$$current\ ratio = \frac{current\ assets}{current\ liabilities}. \qquad (2.13)$$

rom the calculation of this indicator, the higher the current ratio, the greater the liquidity of assets and the stronger the short-term solvency. However, due to the different nature of operations in various industries, the requirements for the liquidity of assets are also different. For example, commercial retail companies often require more liquid assets than manufacturing companies, because the former needs to invest more money in inventory. In addition, the company's business and financial management methods also affect the current ratio.

It is generally considered that the current ratio should not be too high nor too low and should be maintained at around 200%. Excessive liquidity ratios indicate that companies have more funds that are left on liquid assets and have not been put to better use. For example, there is a backlog of excess inventory, there is a large amount of accounts receivable, and there is excessive cash flow, the cash flow may be reduced. Slowly affect its profitability. Sometimes, despite the company's cash flow, the company may still have a higher current ratio

Quick Ratio

Quick Ratio reflects the repayment ability of the company's cash or current assets to its current liabilities. The basic formula is as follows,

$$quick\ ratio = \frac{(current\ assets - inventories)}{current\ liabilities}. \qquad (2.14)$$

Under normal circumstances, the quick ratio of the company is 1, and the quick ratio below 1 is considered as short-term solvency is low. But this is only a general view because different industries, the quick ratio will be very different, there is no uniform standard quick ratio. If the ratio is high, it indicates that the company’s excess liquidity and production capacity are problematic; If the ratio is too low it indicates that the company’s current debt is excessive, and risks of repayment may occur

Cash Ratio

The cash ratio measures the liquidity of the company's assets by calculating the ratio of the company's cash and total cash equivalent assets to current liabilities. The basic formula is as follows,

$$cash\ ratio = \frac{(cash + marketable\ securities)}{current\ liabilities}. \qquad (2.15)$$

This formula reflects the company’s ability to pay current debt without relying on inventory sales and receivables.

The cash ratio is the ratio of the balance of current assets after deducting accounts receivable to current liabilities, which best reflects the ability of the company to directly repay current liabilities. If this ratio is too high, it means that the company's current assets cannot be reasonably used.

2.5.3 Solvency ratio

The company's solvency includes short-term solvency and long-term solvency. The ratios that reflect short-term solvency, that is, the ability to convert corporate assets into cash for repayment of short-term debt, mainly include current ratios and quick ratios the ratio that reflect the long-term solvency, that is, the company's ability to repay long-term debt, debt ratio, dept to equity ratio.

A) Debt Ratio

Debt ratio refers to the ratio of a company's total liabilities divided by total assets. This ratio can show the percentage of assets obtained from financing borrowings and the course of debt management and can also explain the protection of claims. Debt is the right of the creditor to claim assets. When the amount of creditor's claims on the assets is greater, the possibility that the company will recover all loans after liquidation is smaller. Moreover, the larger the ratio, the more the assets of the company are from debt, and the less the financial results of the company are. With more debt and more interest charges, the more unfavorable the creditors are. Creditors often hope that the smaller the proportion of debt, the better. The formula is as follows,

$$debt\ ratio = \frac{total\ debt}{total\ dssets}. \tag{2.16}$$

B) Debt to equity ratio.

This ratio shows how much of the company's debt is absorbed per 1 unit of assets. Its calculation formula is:

$$debt\ to\ equity\ ratio = \frac{total\ debt}{equity}. \tag{2.17}$$

analysis of this ratio, you can measure the size of the company's long-term solvency because the liability is a fixed liability, regardless of the company's profit and loss, should pay interest on time, due Must be repaid. It is generally believed that the ceiling of the debt to equity ratio should be lower than 100%. However, it must be made clear that for investors, the debt to equity ratio is not the lower the better because the company's own assets need to be maintained at a level that is sufficient to protect corporate credit relative to its liabilities. The low rate of this ratio indicates that the company's ability to raise debts needs to be enhanced.

C) Interest coverage ratio.

The basic formula is as follows,

$$interest\ coverage = \frac{EBIT}{interest\ paid}. \tag{2.18}$$

this ratio can be used to test the company's ability to pay interest. The higher the interest coverage ratio, the more secure the interest received by each creditor in each period. Taking company A as an example, its interest expense is 92,000 yuan, and its pre-tax profit is 1 million yuan. Based on formula (2.18), the company's interest coverage is 11.87

2.5.4 Activity ratio

Activity ratio is used to reflect the flow of assets from input to output during the period of business operations. It can reflect the management quality and utilization efficiency of corporate assets. Activity ratio can be divided into short-term ratio and long-term ratio. The short-term ratio mainly focuses on the use efficiency of inventory and accounts receivable. The long-term ratio mainly refers to the total assets turnover, which is focus on the efficiency of the use of all assets of company. The basic formulas are as follow,

$$average\ collection\ period\ (ACP)=\frac{account\ reciviable}{revenues}\cdot 360, \tag{2.19}$$

$$accounts\ \ receivable\ \ turnover(ART)=\frac{revenues}{accounts\ receivable}, \tag{2.20}$$

$$inventory\ \ turnover(IT)=\frac{cost\ of\ goods\ sold}{average\ inventory}, \tag{2.21}$$

$$total\ \ assets\ \ turnover(TAT)=\frac{revenues}{total\ assets}. \tag{2.22}$$

$$average\ \ inventory=\frac{(opening\ inventory+ending\ inventory)}{2} \tag{2.23}$$

Here, the ACP measures the conversion of accounts receivable into cash. ART reflects times the times of turnovers of accounts receivable during a year. IT shows the turnover times of the company's inventory in one year. TAT shows how successfully the company is using its assets to generate revenue

2.6 DuPont Analysis

DuPont analyzes the financial indicators centered on the return on equity. DuPont analysis is to use the relationship between several major financial ratios to comprehensively analyze the financial status of the company. This analysis method was first used by DuPont company, so it is named DuPont analysis. DuPont analysis is a classic method used to evaluate the company's profitability and return on shareholders' equity, and to evaluate corporate performance from a financial perspective. The basic idea is to decompose the enterprise's ROE into multiple financial ratio products step by step, which is helpful for in-depth analysis and comparison of business performance.

The most significant feature of DuPont's model is that it combines organically the ratios used to evaluate the company's operating efficiency and financial status and forms a complete index system based on its internal links, and finally reflects it comprehensively through the equity rate of return. By adopting this method, the level of financial ratio analysis can be made clearer and more conspicuous, which is convenient for report analysts to comprehensively and carefully understand the operation and profitability of the enterprise.

The basic idea of DuPont Analysis is:

1. The ROE is a comprehensive financial analysis index and is the core of the DuPont analysis system.

2. The NPM is the most important indicator affecting the ROE. Assets turnover ratio and financial leverage also have a big affection to ROE. The analysis of the asset turnover rate requires an analysis of the factors that affect the asset turnover to identify the major issues affecting the company's asset turnover. The NPM reflects the income level of sales revenue. Expanding sales revenue and reducing costs and expenses are the fundamental ways to increase the profitability of corporate. Expanding sales is also a necessary condition and approach to increase the asset turnover rate. The basic formula is as follows,

$$ROE=\frac{EAT}{Equity}=\frac{EAT}{Revenues}\cdot\frac{Revenues}{Total\ Assets}\cdot\frac{Total\ Assets}{Equity}. \qquad (2.24)$$

If you want to study the effect of each indicator on the result, you need Method of gradual changes. The basic formula is as follows,

$$\triangle x_{a1}=\triangle a_1\cdot a_{2.0}\cdot a_{3.0}$$

$$\triangle x a_2=a_{1.1}\cdot\triangle a_2\cdot a_{3.0}$$

$$\triangle x a_3=a_{1.1}\cdot a_{2.1}\cdot\triangle a_3 \qquad (2.25)$$

x is basic ratio, Δx is absolute change in the basic ratio, a is component ratio, Δa is absolute change in the component ratio, $\Delta x_{a1}$is absolute change in the basic ratio caused by the change in the first (a_1) component ratio

Chapter 3. Description of selected company

Sinopec Group is a super large-scale petroleum and petrochemical enterprise group reorganized and established based on the former China Petrochemical Corporation in July 1998. It is a state-owned company, a state-authorized investment company, and a state holding company. The registered capital of the company is 231.6 billion yuan. The chairman of the company is the legal representative and its headquarters is in Beijing.

The company's main business scope includes: industrial investment and investment management; oil, natural gas exploration, mining, storage and transportation (including pipeline transportation), sales and comprehensive utilization; coal production, sales, storage, transportation; petroleum refining; refined oil storage , transportation, wholesale and retail; production, sales, storage and transportation of petrochemical, natural gas chemical, coal chemical and other chemical products; production, sales, storage and transportation of new energy, geothermal, and other energy products; exploration of petroleum and petrochemical projects, Design, consulting, construction, installation; overhaul and maintenance of petroleum petrochemical equipment; R&D, manufacturing and sales of electromechanical equipment; electricity, steam, water, and industrial gas

This chapter is based on Baidu Encyclopedia, Sinopec Group (online), Sina Finance Network

3.1 The development of Sinopec Group

On February 19, 1983, the Central Committee of the Communist Party of China and the State Council issued a "Notice" and decided to establish China Petroleum and Chemical Corporation. On July 12, the inaugural meeting of China Petrochemical Corporation was held in the Great Hall of the People.

On February 28, 2000, Sinopec Corp., an exclusive company initiated and established by the Petrochemical Corporation. On March 30, according to State Council regulations, China Xinxing Petroleum Co., Ltd. was incorporated into the petrochemical group company. From October 9 to 12, Sinopec issued 16.78 billion shares of H shares overseas for the first time, raising funds of US$3.46 billion. On the same month, on the 18th and 19th of the same month, Sinopec's H shares were listed in Hong Kong, New York and London respectively.

On January 22, 2001, Sinopec Group International Petroleum Exploration and Development Corporation was established. From July 16 to July 19, Sinopec Corp. publicly issued 2.8 billion A shares in China and raised 10.8 billion yuan in funds. On August 8, Sinopec A shares were listed on the Shanghai Stock Exchange.

On February 28, 2002, the signing ceremony of the joint venture between Sinopec Corp. and PCCW Ltd. for the establishment of Petrochemical PCG Information Technology Co., Ltd. was held in Beijing. On April 11, Sinopec Southern Exploration and Development Branch was established. On May 29, the lubricants branch of Sinopec Corp. was reorganized.

On August 26th, 2004, Sinopec, Exxon Mobil, Saudi Aramco and Fujian Refining and Chemical Corporation signed an agreement for the initial design expansion of the Fujian Refining and Chemical Integration Project at the headquarters. Fujian Fuel Marketing Joint Venture Company jointly submitted scientific research agreements and petroleum product sales agreements. On September 22, the inauguration ceremony of Sinopec Shanghai Asphalt Sales Branch was held at Xingguo Hotel in Shanghai.

On June 22, 2005, the groundbreaking ceremony for the construction of the Qingdao Oil Refining Project was held in Qingdao. On June 29, the official launch ceremony of Shanghai Secco's 900,000-ton ethylene project was held in Shanghai.

On September 20, 2006, Zhenhai National Petroleum Strategic Reserve Bank was completed and put into use. On October 10, the share reform of the A share market was implemented. On October 11, Hainan Refining & Chemical Co., Ltd. increased its registered capital by capital injection. After completion of the capital increase, it holds 17% equity interest in Hainan Refining & Chemical Co., Ltd. On November 6, the groundbreaking ceremony of Sinopec Zhenhai Petrochemical 1 million tons/year ethylene project was held in Zhenhai Refinery. On November 18, the Sinopec Maoming 1 million tonne/year ethylene expansion project went into operation.

On April 9, 2007, the State Council formally approved the Sichuan-East Gas Transmission project and included it in the national "Eleventh Five-Year" major project. On February 20, 2008, Sinopec issued 30 billion yuan of segregated convertible bonds in China.

On August 18, 2009, Sinopec successfully acquired Addax, an independent oil company headquartered in Switzerland. On November 11, the Fujian Refining and Ethylene Integration Project was formally put into commercial operation. On November 23, Sinopec formally promulgated the "Corporate Culture Outline of China Petrochemical Corporation". On December 28, the foundation stone laying ceremony of the China Petrochemical Science and Technology Research Center was held in Shahe Satellite City, Changping District, Beijing.

On March 23, 2010, the signing ceremony for the strategic partner of China's space industry was held in Beijing. Sinopec Corp. is the first strategic partner of China's space industry. On March 29, Sinopec announced that the national "Eleventh Five-Year" major project - the Sichuan-East Gas Transmission project was completed and put into operation. The trunk line of the Sichuan-East Gas Pipeline Project has a total length of more than 1,700 kilometers and a designed capacity of 12 billion cubic meters of purified natural gas per year. The total investment is 62.676 billion yuan. On April 20th, Zhenhai Refining & Chemical Co., Ltd.'s ethylene cracker with a capacity of 1 million tons per year produced qualified ethylene and achieved a successful start. On May 11, Tianjin million-million-ton ethylene and 10 million-ton oil-refining integrated projects were officially put into commercial operation. On the morning of June 5, the inauguration ceremony of Sinopec Fuel Oil Company was held at the Beijing National Convention Center. On December 8, Sinopec invested 7 million U.S. dollars to support Beijing's successful bid to host the 2015 World Championships and become an official partner of the IAAF.

On February 2, 2011, Sinopec successfully acquired OXY Argentina's assets. On April 23, the first shale oil horizontal well, Sinopec, officially drilled in the HF-1 well.

On May 7, China's first high-sulfur open hole horizontal well, Maoba 503-2H, was put into operation. 12 mm gas nozzle separator production, Nissan natural gas 692,000 cubic meters, unobstructed flow of natural gas production of 6.277 million cubic meters. On May 13th, the 100,000 tons/year unsaturated resin plant jointly constructed by Sinopec and Dutch DSM Group was formally established in Nanjing Chemical Industry North Campus. On July 13th, Sinopec Sichuan Vinylon Plant became the first in China and the second largest manufacturer in the world in the production of vinyl acetate and polyvinyl alcohol. On July 15th, Sinopec's first shale gas horizontal well, Page HF-1, was successfully drilled and transferred to the well completion stage. On July 28, the groundbreaking ceremony of Sinopec Singapore Lubricant

Project was held in Singapore. On July 28th, the 24th Grand Prix of Hart Energy announced that Sinopec won the International Refinery Corporation Excellence Award. On August 3, Sinopec proposed the development goal of “building a world-class energy and chemical company”. On August 9th, Sinopec and Australia Pacific Liquefied Natural Gas Co., Ltd. (APLNG) completed the delivery of the AOLNG 15% share subscription project.

On January 3, 2012, Sinopec signed an agreement with Devon Energy of the United States to acquire a one-third stake in the company's five shale oil and gas assets. On January 15th, Sinopec and Saudi Arabian Petroleum Corporation and Saudi Arabian Basic Company jointly extended the joint venture agreement of the refinery and the Tianjin polycarbonate project in the Riyadh Agency. On March 28th, Sinopec Corp. acquired a 30% equity interest in Galp Brazil’s assets and completed delivery in both Brazil and the Netherlands. On April 3rd, the 3 billion cubic meters of natural gas capacity building project in the Daguang Block of the Puguang Gas Field was successfully put into production and became an important resource replacement site for the Sichuan-East Gas Transmission Project. On April 13, the State-owned Assets Supervision and Administration Commission of the State Council held a working meeting of the Board of Directors of the company's construction standard at the headquarters of China Petrochemical Corporation and announced the establishment of a board of directors of China Petrochemical Corporation. The board of directors consists of nine directors, including five foreign directors and one employee director. On May 10, Sinopec Corp. successfully issued 3 billion U.S. dollars in international bonds. This is the first time that the company has entered the international bond market for direct financing. On June 28, Sinopec Refining Sales Co., Ltd. was established in Shanghai. On July 12, Sinopec and Australia Pacific Liquefied Natural Gas Co., Ltd. (APLNG) completed the delivery of a 10% stake in APLNG. On July 26, Sinopec Tahe Refinery Co., Ltd. and Xinjiang Road Oil & Petrochemical Co., Ltd. were unveiled. On September 3, the unveiling ceremony of Sinopec Petrochemical Engineering (Group) Co., Ltd. was held at China Petrochemical Headquarters. On September 28, Sinopec Great Wall Energy & Chemical Co., Ltd. was unveiled and established, marking the beginning of a period of rapid advancement and professional development for Sinopec's coal chemical business. On November 19, Sinopec reached an agreement with French Total to acquire the company’s 20% interest in the OML138 block. On November 30th, the 14th China Patent Awards Conference

was held in Beijing. Sinopec won a total of 5 awards, including "Benzene and Ethylene.
The “Alkylation method of ethylbenzene” and “A method of hydrotreating of caprolactam” won the China Patent Gold Award. On December 18th, Sinopec Corp’s acquisition of a 49% stake in the British subsidiary of Talisman Energy Corporation was formally completed. On January 27th, Zhenhai Refining & Chemical's 1 million-ton/year ethylene project won the National Quality Project Gold Award and achieved the “Zero” breakthrough of the Guoyou Gold Award in the history of Sinopec's engineering construction. On December 27, the first set of toluene methyl alcohol methylation industry in China The successful completion of the plant's industrial operation tests at Yangzi Petrochemical marks that Sinopec Corp. has become the world's first company to possess a proprietary technology for the methylation of toluene and methanol. On December 28, Sinopec Petroleum Engineering & Technical Services Co., Ltd. was unveiled in Beijing

In February 2017, Brand Finance released the 2017 Global Top 500 brands list, and Sinopec ranked No. 32.

In June 2017, "Brand Z Top 100 Most Valuable Global Brands in 2017" was announced, and China Petrochemical Corporation ranked the 85th.

On July 12, 2017, China Petrochemical Corporation received the SASAC 2016 operating performance assessment A level.

In September 2017, China Petroleum & Chemical Corporation ranked second in the 2017 Top 500 Chinese Enterprises.

3.2 Corporate Culture of Sinopec Group

Logo brand

Sinopec logo consists of three parts: Chaoyang graphic, Chinese abbreviation and SINOPEC. Representing Sinopec in its commitment to sustainable development, Sinopec Corp., through a comprehensive upstream, midstream, and downstream industrial chain, shoulders the Holy Spirit mission of social responsibility, environmental awareness, and consumer quality of life. The red circle links Chinese and English as a whole harmoniously. It means that Sinopec is a provider of energy. It is the bloodline of economic operation. It is the Chaoyang industry and is moving towards the vision of building a world-class energy and chemical company.

Sinopec’s Mission

Sinopec's mission is to “refuel for a better life”. Adhere to the mankind's yearning for a better life as the direction of business development, and strive to provide more advanced technologies, better products and more considerate services, and help fuel the development of society; adhere to the green and low-carbon sustainable development path, Accelerate the construction of industrial structures and production methods that are conducive to resource conservation and environmental protection, and make contributions to promoting the construction of ecological civilization; adhere to the development concept of cooperation and win-win development, so that the company will continue to grow and expand, while bringing benefits to all stakeholders.

Corporate vision

Sinopec Corp.'s vision is to “build itself as a people-satisfied, world-class energy and chemical company”.

-- Committed to becoming a company that people are satisfied with. Sinopec should pay more attention to the development of quality and efficiency, more prominent technological progress, more prominent green and low carbon, more people-oriented, and strive to provide first-class products, technologies and services, to show first-class social responsibility image, so that employees, customers, shareholders, the community The public and the people in the countries (regions) where the business is located are satisfied and strive to become highly responsible and highly respected companies.

-- Committed to becoming a world-class company. World-class companies not only need first-class scale, quality and efficiency, but also need first-class enterprise management and social image, but also need first-class marketization and international competitiveness. Sinopec should compare itself with the standards of world-class companies and, through hard work, become an advanced enterprise with standardized governance, efficient management, advanced culture, high degree of marketization, and strong international operating capabilities, and it has world-class technology, talents, and brands.

-- Committed to becoming a green, efficient energy chemical company. In the main direction of energy and chemical work, we will do a good job of strategic layout and business structure optimization. While developing traditional businesses, Sinopec will continue to develop and efficiently use emerging energy such as shale gas, geothermal, and bioenergy to develop new chemical materials. Promote the clean utilization of coal resources and become a green and efficient energy chemical company.

The above three aspects are organically unified, reflecting the requirements for the development of enterprises under the background of economic globalization, embodying the essential characteristics of international companies, and reflecting the development trend of the energy industry. It is the conscious pursuit of the reform and development of Sinopec.

Core value

Sinopec Corp. takes "humanism, responsibility, integrity, refinement, innovation, and win-win" as its core values.

Humanism - people-oriented, development of enterprises. Starting from the needs of customers and the public, we will determine the direction of the company's development, develop first-rate products and provide first-class services. Taking employees as the main force of the company's development, creating conditions for the full development of employees, so that employees can live happier.

Responsibility - serve the people for the benefit of humanity. While fulfilling the responsibility of the state-owned enterprises and contributing to the country, they must simultaneously make contributions to the countries (regions) where the business is located and perform related economic, legal, and philanthropic responsibilities. They must also fulfill the responsibilities of international companies, develop first-rate products, and provide first-class services. For the benefit of all humanity.

Integrity - Confidence, promise, and promise. Adhere to the "every drop of oil is a commitment", the establishment of a credit enterprise as the basis for the development of enterprises, education and guidance of each employee to be honest, honest, honest, law-abiding business, standardized operation, and establish a good enterprise Brand.

Fine - fine rigorous, ending in perfection. With rigorous requirements and meticulous attitude, we have cultivated a full and precise work style, pursued meticulous production on the production, calculated on the operation, exquisitely carved on the management, and kept improving on the technology, and strived to enhance the production and management level.

Innovation - based on leadership, the pursuit of excellence. Innovating through the entire process of the company's production and operation, it vigorously promotes innovation in concepts, systems, mechanisms, management, technology, products, services, etc., leads the development of the market, creates industry benchmarks, and achieves outstanding quality.

Win-win - cooperation, mutual benefit and common development. Adhere to openness, inclusiveness, sincere cooperation, follow and respect the laws and regulations, cultural conventions of the countries (regions) where the business is located, extract and integrate the excellent culture and advanced experience of the partners, help customers enhance their value, and achieve mutual development between the company and stakeholders. Mutual benefit and win-win situation.

3.3 Industries

3.3.1 Oil and gas exploration and development

As of the end of 2011, Sinopec Corp. is the second-largest domestic oil and gas producer in China. The company's oil and gas exploration and development blocks are located in eastern, western and southern China. As of December 31, 2011, it had 297 blocks of exploration licenses, with a total exploration area of 956,800 square kilometers, holding 192 blocks of mining licenses and a total mining area of 20,300 square kilometers.

In 2011, the company added a total of 410.73 million barrels of oil equivalent oil and gas recoverable reserves, including 280.92 million barrels of recoverable crude oil reserves and 778.819 billion cubic feet of recoverable natural gas reserves. In the year, it produced 321.73 million barrels of crude oil and 516.94 billion cubic feet of natural gas. Shengli Oilfield is the company's most important crude oil production base. In 2011, it produced a total of 194.11 million barrels of crude oil.

As of December 31, 2011, the company's remaining oil and gas recoverable reserves were 3,966.21 million barrels of oil equivalent, including 2,848.10 million barrels of crude oil and 6.7608 billion cubic feet of natural gas.

At the end of 2011, the company launched five general campaigns for Shengli Oilfield, Tarim Basin, Ordos Basin, Sichuan Basin, and unconventional oil and gas production.

On January 6, 2016, Sinopec Group announced that its “Four-Four Wells” deployed in the Beibu Gulf area had successfully completed two layers of oil-bearing formation tests on January 5 and tried to obtain high-yield oil flow. The daily production of oil and gas exceeded 10,000 tons. Among them, the first layer of the target interval test, Nissan sprayed 1458 cubic meters of high-quality crude oil (about 1264 tons), natural gas 71,800 cubic meters, the second layer Nissan sprayed high-quality crude oil from the 1349 cubic meters (about equal to With 1184 tons of natural gas and 76,000 cubic meters of natural gas, it is the highest single-well record for oil and gas exploration in Sinopec, and it is also a rare high-production test exploration well in the past decade, bringing new hope for exploration breakthroughs in the Beibu Gulf area.

3.3.2 Refining production and management

Oil refining

As of the end of 2011, Sinopec Corp. is China's largest petroleum refiner and the largest producer of petroleum products in China. Its petroleum refining capacity ranks second in the world. Its main products include gasoline, kerosene, diesel oil, and lubricants. The three refining and chemical enterprise clusters are mainly distributed in the southeastern coastal areas, the middle and lower reaches of the Yangtze River, and North China, and are the most active and developed regions in China. They have superior geographic location, convenient transportation, and strong market demand, providing a steady stream of momentum for China's economic development. At the end of 2011, Sinopec had a processing capacity of 247 million tons

In 2013, the company processed 234 million tons of crude oil in the year, an increase of 4.8%; refined oil production was 141 million tons, an increase of 5.2%; and chemical light oil production was 38.23 million tons, an increase of 4.9%.

By optimizing the production plan, adjusting process operations, increasing the production of high-value products such as gasoline, aviation coal, and asphalt, and reducing the production of low-value-added products such as diesel, commodity heavy oil, and petroleum coke, remarkable results have been achieved. The production of gasoline was 45.94 million tons, an increase of 11.8%, and the amount of super processing increased by 7 percentage points. The production of aviation coal was 17.43 million tons, an increase of 16.1%, and the increase in super-processing volume was 11.4 percentage points. The production of asphalt was 7.72 million tons, an increase of 24.0%, and the amount of super processing increased by 19.1 percentage points. Production of diesel oil was 77.48 million tons, a decrease of 0.4%, which was lower than the processing volume increase of 5.2 percentage points. Production of 13.8 million tons of petroleum coke, an increase of 1.8%, which is 3 percentage points lower than the increase in processing volume

On April 24, 2013, Sinopec No. 1 Bio-Fish Coal successfully flew at Shanghai Hongqiao Airport. On February 12, 2014, the Civil Aviation Administration of China formally issued the CTSOA (No. 1) Biological Aviation Coal Technology Standards Project Approval (CTSOA) to China Petrochemical Corporation. Sinopec No. 1 Bio-Flight Coal obtained airworthiness permit, which is a new development and new breakthrough for China's bio-aviation coal industry, making China the fourth country after the United States, France and Finland to have independent R&D production technology for bio-aerospace coal. Sinopec Corp. has become the first domestic company to have independent research, development and production technologies for biological aviation coal.

Oil sales

The major markets for Sinopec's oil products sales include all provinces, autonomous regions, municipalities directly under the Central Government, and special administrative regions of China except Taiwan Province.

Sinopec's refined oil sales network consists of three major components. First, Sinopec's wholly-owned subsidiary, Sinopec Sales Co., Ltd. and its four major sub-divisions in the major markets, undertook the unified balance of Sinopec's refined oil resources, transportation coordination, and direct sales companies, as well as special users. The second is the sales network consisting of provincial oil companies (including Hong Kong companies) and their respective regional (prefecture) companies; third is Sinopec's joint venture with other refined oil business units nationwide and taken Franchise method established sales network.

As of the end of 2011, the company had 30,121 gas stations, of which 15 were franchised gas stations.

In 2011, sales of refined oil in the company reached 151 million tons, an increase of 7.6% year-on-year.

3.3.3 Chemical production and management

As of the end of 2011, Sinopec Corp. is the largest petrochemical product manufacturer and distributor in China. Its petrochemical production plants are located in economically and market-developed regions such as eastern, central and southern China. It produces and sells various petrochemical products, including intermediate petrochemical products and synthetic resins. , synthetic fiber raw materials and polymers, synthetic fibers, synthetic rubber and fertilizers. The company's petrochemical production and the company's refining business are integrated upstream and downstream, and chemical raw materials (such as naphtha) are mainly provided by the company's refining production companies. Most of the company's petrochemical products are sold in the Chinese domestic market.

By the end of 2011, the company's major chemical product capacity (including newly built and expanded retrofit devices in the past), production, and market share were as follows:

There are 13 ethylene production enterprises, including 4 joint venture companies. The annual production capacity is 9.425 million tons and the actual production of ethylene is 9.894 million tons. There were 30 synthetic resin production enterprises, with annual production capacity of 12.9886 million tons at the end of the year, annual output of 13.652 million tons, domestic synthetic resin market share of 22.05%, 5 synthetic rubber production enterprises, and production capacity of 930,000 tons, and 990,000 synthetic rubber productions. Tons, the domestic market share was 25.1%. Synthetic fiber monomer and polymer production companies 15, equipment production capacity of 9,286,400 tons, the production of synthetic fiber raw materials and polymers 9.38 million tons that year, the domestic market share of 20.33%. There were 8 synthetic fiber production enterprises, with a production capacity of 1.5446 million tons of polyester, acrylic, nylon, and polypropylene fibers. In that year, 1.88 million tons of synthetic fibers were produced, and the domestic market share was 4.76%.

3.4 Company Size

According to the International Financial Reporting Standards, in 2013, the company achieved a turnover and other operating income of RMB 2,80,311 million, an increase of 3.4% over 2012, and operating income of RMB 96,785 million, a decrease of 1.9% from 2012. The profit attributable to shareholders of the company was RMB 66.132 billion, an increase of 3.5% over 2012. Basic net profit per share is RMB 0.57.

According to the Chinese Accounting Standards for Business Enterprises, in 2013, operating profit was RMB 96.353 billion, an increase of 9.7% over 2012; net profit attributable to shareholders of the company was RMB 67.179 billion, an increase of 5.8% over 2012. The basic earnings per share was RMB 0.579.

The board of directors of the company proposed that in 2013, final dividend of RMB 0.15 was paid, plus dividends of RMB 0.09 per share had been paid during the interim period, and the annual dividend was RMB 0.24 per share. In recent years, the dividend distribution ratio of the company has increased year by year. In 2013, the dividend distribution ratio was 42.1% (according to International Financial Reporting Standards). In the whole year, a cash dividend of 27.98 billion yuan was distributed. Based on the average share price of the year, the dividend yield of H shares reached 4.82%.

Exploration and development business segment, in 2013, through the strengthening of exploration and development in five key regions, achieved a steady growth in oil and gas storage production, the annual oil and gas equivalent production was 442.84 million barrels, an increase of 3.48% over 2012; of which crude oil production was 3.2354 million barrels, This represents an increase of 1.30% over 2012, with natural gas production of 606.18 billion cubic feet, an increase of 10.4% over 2012. The operating income was RMB 54.8 billion.

In the oil refining business segment, in 2013, processed crude oil was 232 million tons, an increase of 4.81% over 2012; and refined oil production was 140 million tons, an increase of 5.59% over 2012. The sales of refined oil products increased, and the operating income was RMB 8.6 billion.

In the chemical business segment, in 2013, the equipment load, and production plan were adjusted in a timely manner, and the adjustment of raw materials and product structure was the top priority. The annual ethylene production was 9.98 million tons, an increase of 5.58% over 2012, and the total chemical product business was 58.23 million. Tons, an increase of 7.14% from 2012, and an operating income of RMB 900 million.

The oil product sales business segment responded to the structural changes in the demand for refined oil products, flexibly adjusted its marketing strategy, increased sales of high-grade gasoline and aviation coal, and took the lead in providing high-quality refined oil products to the market. In 2013, the total sales volume of refined oil products reached 180 million tons. The total sales volume of domestic refined oil products reached 165 million tons, an increase of 4.04% over 2012, and the operating income was RMB 35.1 billion.

In the area of science and technology development, in 2013, it applied for 4,442 domestic and foreign patents, obtained 2388 domestic and foreign patent grants, won two national technological invention awards and two scientific and technological progress awards, and won six Chinese patent excellence awards.

In terms of safety, environmental protection, energy saving and emission reduction, compared with 2012, the comprehensive energy consumption per 10,000 yuan production value dropped by 2.01%, the industrial water intake decreased by 1.19%, the COD output of the effluent discharged was reduced by 3.85%, and the sulfur dioxide emission decreased by 4.71%. The rate of proper disposal of hazardous chemicals and "three wastes" reached 100%.

In 2013, Sinopec’s annual capital expenditure was RMB 168.597 billion, of which: exploration and development segment capital expenditure was RMB 88.78 billion, new crude oil production capacity was 5.8 million tons/year, and new natural gas production capacity was 2.44 billion cubic meters/year; refining sector Capital expenditures were RMB 26,064 million, which was mainly used for oil refining renovation and expansion projects and oil quality upgrading projects; capital expenditure for the oil products sales segment was RMB 29,486 million, mainly used for the development and renovation of refueling (gas) stations, and the construction of refined oil pipelines and oil depots. The capital expenditure of the Chemicals segment was RMB 19,189 million. Major projects such as Wuhan ethylene and Hainan aromatics were completed and put into operation, and Maoming Polypropylene and other projects were built; headquarters and other capital expenditures were RMB 5,076 million, which was mainly used for the construction of scientific research devices.

4.Financial analysis of Sinopec Group

Financial analysis is an important method of measuring a company's operations. In Chapter 2 we have introduced the methods of financial analysis. Now we will use these methods to conduct financial analysis on the Sinopec Group.

4.1 Common size analysis

Common size analysis shows the ratio of assets/liabilities/cost to total assets/liabilities/income. And it can be divided into two parts: Horizontal analysis and Vertical analysis. To use these two ways to analysis Sinopec Group we need balance sheet, income statement and cash flow statement.

Table 4.1 Simple balance sheet of Sinopec Group (in million RMB)

Reporting period	2016	2015	2014	2013	2012
Total current assets	41,226,100	33,240,500	36,014,400	37,301,000	34,475,100
Total non-current assets	108,634,800	111,072,400	109,122,400	100,990,600	90,252,000
Total assets	149,860,900	144,312,900	145,136,800	138,291,600	124,727,100
Total current liabilities	48,554,300	46,264,200	6,042,5700	57,182,000	49,310,900
Total non-current liabilities	18,054,100	19,486,400	20,001,600	18,783,400	20,356,100
Total Liabilities	66,608,400	65,750,600	80,427,300	75,965,600	69,667,000
Total owner's equity	83,252,500	78,562,300	64,709,500	62,326,000	55,060,100
Total debt and equity	149,860,900	144,312,900	145,136,800	138291600	124,727,100

Source: Sinopec Group (online)

Table 4.2 Simple Income statement of Sinopec Group (in million RMB)

	2016	2015	2014	2013	2012
Money funds	14,249,700	6,855,700	1,010,000	1,510,100	1,086,400
Bill receivable	1,319,700	1,094,900	1,396,300	2,877,100	2,004,500
Accounts receivable	5,028,900	5,612,600	9,083,100	6,846,600	8,139,500
Prepayments	374,900	291,900	378,000	421,600	437,000
Other receivables	2,559,600	2,145,200	2,925,100	1,316,500	880,700
Inventories	15,651,100	14,549,800	18,822,300	22,190,600	21,826,200
Other current assets	2,042,200	2,690,400	2,399,600	2,138,500	100,800
Total operating income	193,091,100	201,888,300	282,591,400	288,031,100	278,604,500
Total operating costs	185,203,500	196,680,200	276,043,300	278,385,800	269,811,900
Operating profit	7,887,600	5,208,100	6,548,100	9,645,300	8,792,600
Non-operating income	496,400	694,500	471,000	348,100	457,300
Non-operating outflow	396,300	306,700	371,000	295,200	239,200
EBT	7,987,700	5,595,900	6,648,100	9,698,200	9,010,700
Income tax expenses	2,070,700	1,261,300	1,757,100	2,560,500	2,369,600
EAT	5,917,000	4,334,600	4,891,000	7,137,700	6,641,100

Source: Sinopec Group (online)

Table 4.3 Simple Cash flow statement of Sinopec Group (in million RMB)

	2016	2015	2014	2013	2012
Cash inflows from operating activities	224,356,500	239,431,800	317,493,700	323,910,500	323,855,100
Cash outflow from operating activities	202,902,200	222,850,000	302,659,000	308,721,200	309,508,900
Net cash flow from operating activities	21,454,300	16,581,800	14,834,700	15,189,300	14,346,200
Cash inflows from investment activities	4,089,800	1,304,400	927,200	974,300	1,026,200
Cash outflow from investment activities	10,711,500	12,999,600	14,190,500	18,848,300	17,354,100
Net cash flows from investing activities	-6,621,700	-11,695,200	-13,263,300	-17,874,000	-16,327,900
Cash inflows from financing activities	50,644,000	119,571,800	113,257,500	117,499,200	93,179,100
Cash outflow from financing activities	59,948,700	118,640,800	115,399,600	114,347,300	92,616,300
Net cash flow from financing activities	-9,304,700	931,000	-2,142,100	3,151,900	562,800
Cash and cash equivalents at the end of the period	12,446,800	6,782,400	935,500	1,504,600	1,045,600

Source: Sinopec Group (online)

4.1.1 Vertical common size analysis

Vertical analysis is an analytical method that can be used for the analysis of financial data. In a financial statement, use the data of each item in the table to compare with the total (or report total) to obtain the position, importance, and change of the item in the population. Through vertical analysis, we can understand the company's business structure.

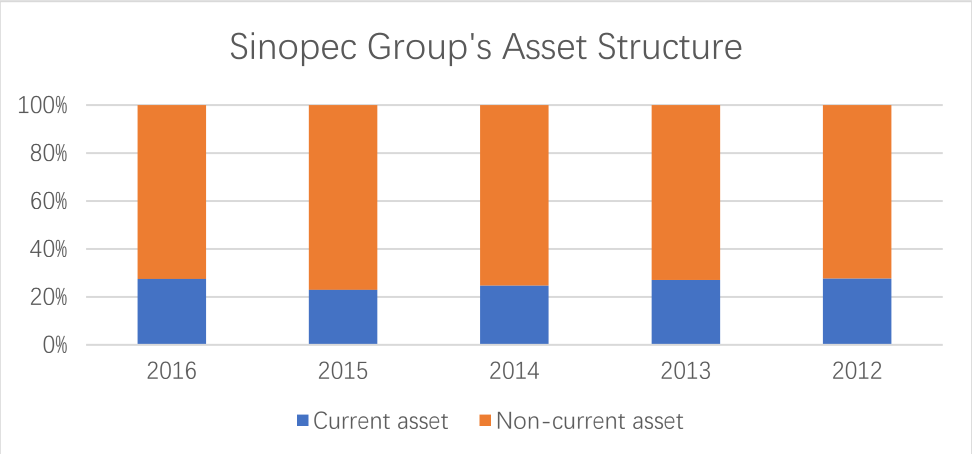
Table 4.4 Vertical common size analysis of assets

	2016	2015	2014	2013	2012
Cash	9.5%	4.75%	0.7%	1.09%	0.87%
Inventories	10.44%	10.08%	12.97%	16.04%	17.5%
Others	7.56%	8.2%	11.15%	9.83%	9.27%
Total current asset	27.51%	23.04%	24.81%	26.97%	27.64%
Non-current asset	72.49%	76.96%	75.19%	73.03%	72.36%
Total asset	100%	100%	100%	100%	100%

Source: own calculation based on table 4.1

This table reflects the proportion of various assets in total assets. From this we can draw the assets structure of Sinopec Group

Chart 4.1 Sinopec Group's Asset Structure



Source: own calculation based on table 4.4

From the table 4.4 we can see that the Sinopec Group's non-current assets account for a significant proportion of total assets. non-current assets refer to non-monetary assets held by enterprises for production of products, provision of labor services, leases, or operations and management that have been used for more than 12 months and have reached a certain standard. It includes houses, buildings, machines, machinery, transportation tools, and other equipment, appliances, tools which related to production and business activities.

However, the ratio of non-current assets to total assets is not the higher the better. The assets occupied by non-current assets will result in weak liquidity, high proportion of non-current assets, high depreciation, and higher costs. The high proportion of fixed assets will cause the asset turnover rate to decrease and affect the profitability of the company.

From the data in the table 4.4, from 2012 to 2016, Sinopec Group's ratio of non-current assets to total assets is between 72% to 77%, with the highest being more than 76%. This means that Sinopec Group's non-current assets account for a larger proportion of total assets, and the corresponding depreciation and taxation are relatively high. At the same time, the higher proportion of non-current assets means that the ratio of current assets is relatively low and the company's capital turnover is difficult.

The reasons for this phenomenon are also obvious. On the one hand, Sinopec Group is an oil-related company. Its oil exploitation, processing and sales must have complete equipment. This equipment is also an important source of these non-current assets. And Sinopec Group has a large scale in China. There are branches around the country. And the construction of these infrastructures has increased the proportion of non-current assets. On the other hand, the Sinopec Group is a state-owned company and the Chinese government has provided it with considerable support. In addition to providing corresponding policy support, there is a lot of financial support. This means that the Sinopec Group does not need to invest large amounts of current assets. And Sinopec Group is in an oligarchic competition in China. The total profit is very large. Even if the ratio of current assets is low, the actual total amount of current assets is high enough to be used for daily production and operation.

At the same time, we can see table 4.4 that Sinopec Group's inventory is also a considerable proportion of total assets. The ratio of inventory to total assets refers to the ratio of the balance of funds occupied by the inventory of enterprise inventory at a certain time point to the total assets of the enterprise. Because of the different industries, different scales, etc., the inventory levels of all companies are not consistent. Therefore, the best index for comparing inventory levels is the inventory-to-assets ratio. Changes in the historical trend of the indicator and the comparison with the industry average can make an effective assessment of the company's inventory-occupied funds.

If the ratio of inventory to total assets is too high, not only will there be a large backlog of company funds, but also due to changes in market conditions, the prices of inventories may also change significantly. Once the market prices fall, the company will incur inventory discounts in accordance with accounting standards. The risk of preparation is great and affects the profitability of the company; therefore, maintaining a stable and appropriate ratio of inventory to total assets helps the company's long-term, stable development. By continuously observing the ratio of inventory to total assets for several accounting periods, the company can analyze the changes in the level of inventory utilization efficiency.

Another aspect of inventories to total assets ratio can be understood as follows: if the ratio of total inventory to total assets of the company is too large, the company has further internal demand for destocking. Currently, companies often increase sales by lowering the selling price and gross profit margin. On the contrary, it is possible that the gross profit rate will further increase, and the company's performance may also be further improved.

The Sinopec Group's inventory as a percentage of total assets varies roughly between 10% and 20%. Although it occupies a significant proportion in its own asset structure. However, compared to other companies, the proportion of inventories is relatively low. This means that Sinopec Group's product sales are very smooth. This is mainly because China’s demand for oil is very large and the Sinopec Group is in oligopoly.

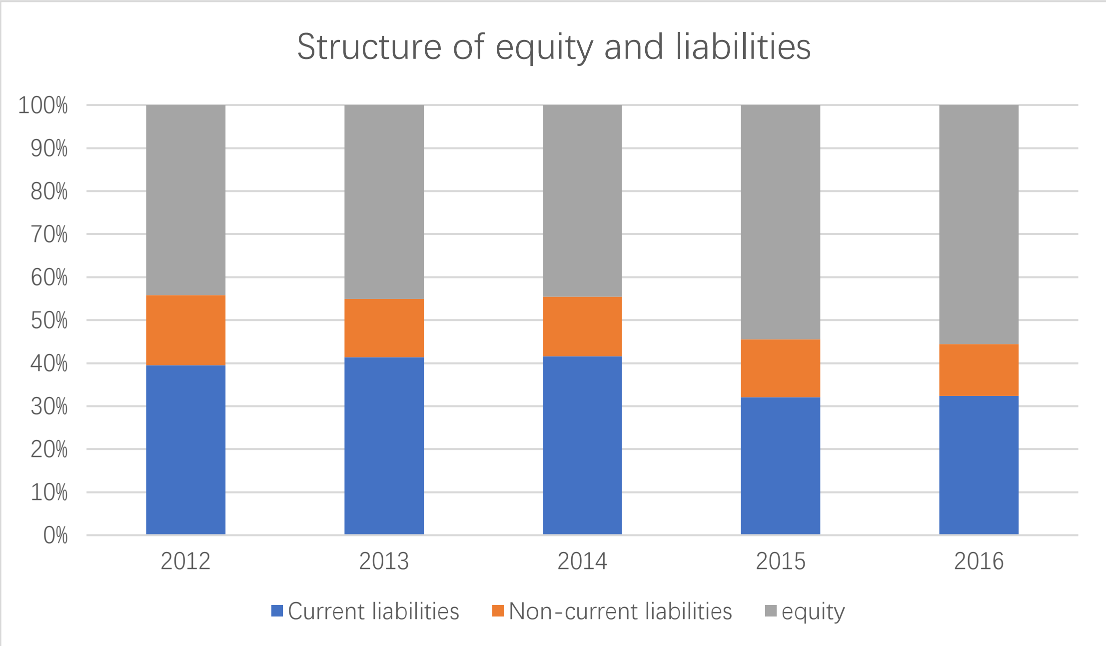
The above is a vertical analysis of the asset. Next, we will analyze the liability and owner's equity.

Table 4.5 Vertical common size analysis of equity and liabilities

	2016	2015	2014	2013	2012
Total current liabilities	32.4%	32.06%	41.63%	41.35%	39.53%
Total non-current liabilities	12.05%	13.50%	13.78%	13.58	16.32%
Total liabilities	44.45%	45.56%	55.41%	54.93%	55.85%
Total equity	55.55%	54.44%	44.59%	45.07%	44.15%
Total equity and liabilities	100%	100%	100%	100%	100%

Source: own calculation based on table 4.1

Chart 4.2 Structure of equity and liabilities



Source: own calculation based on table 4.5

In the table 4.5, we can find that owners' equity and current liabilities occupy a considerable proportion of total liabilities and owners' equity. It reflects that the main source of Sinopec Group Capital is current liabilities and shareholders' investments. At the same time, the proportion of total non-current liabilities is small. This means that Sinopec Group relies more on current liabilities than other liabilities.

From 2012 to 2016,the difference in the proportion of the total liabilities of the owners' equity is always maintained at around 10%, which means that the Sinopec Group achieves a better balance and stability between the liabilities and the owners' equity.

4.1.2 Horizontal common size analysis

Horizontal analysis method is a cross-sectional study of the data during the same period, the characteristic of Horizontal common size analysis is to discuss the specific characteristics of various things, phenomena and processes based on horizontal relations, and explore the trends of the changes of objects.

Table 4.6 Absolute changes of income statement (in million RMB)

	2015/2016	2014/2015	2013/2014	2012/2013
Total operating income	-8,797,200	-80,703,100	-5,439,700	9,426,600
Total operating costs	-11,476,700	-79,363,100	-2,342,500	8,573,900
Operating profit	2,679,500	-1,340,000	-3,097,200	852,700
Non-operating income	-198,100	223,500	122,900	-109,200
Non-operating outflow	89,600	-64,300	75,800	56,000
Income tax expenses	809,400	-495,800	-803,400	190,900
EAT	1,582,400	-556,400	-2,246,700	496,600
Earnings per share	0.11	-0.14	-0.17	-0.15

Source: own calculation based on table 4.2

In table 4.6 we get the absolute value change of the Income Statement. Through these data, we can get the value of the relative change

Table 4.7 Relative changes of income statement

	2015/2016	2014/2015	2013/2014	2012/2013
Total operating income	-4.36%	-28.56%	-1.89%	3.38%
Total operating costs	-5.84%	-28.75%	-0.84%	3.18%
Operating profit	51.45%	-20.46%	-32.11%	9.70%
Non-operating income	-28.52%	47.45%	35.31%	-23.88%
Non-operating outflow	29.21%	-17.33%	25.68%	23.41%
Income tax expenses	64.17%	-28.22%	-31.38%	8.06%
EAT	36.51%	-11.38%	-31.48%	7.48%
Earnings per share	40.74%	-34.15%	-29.31%	-20.55%

Source: own calculation based on table 4.6

Based on the information in table 4.7 we can see that Sinopec Group's total revenue for the five years has shown a trend of first decline and then increase. The operating income dropped drastically between 2013 and 2014. This is mainly because on January 12, 2014, China Petroleum & Chemical Corporation issued an announcement to explain the reasons for the accident of leakage and explosion of the Sinopec Donghuang Oil Pipeline in Qingdao, China on November 22, 2013, as well as the compensation for damages. The announcement pointed out that the accident caused direct economic losses of 7.5172 billion yuan. Sinopec will bear its corresponding liability for compensation. The accident brought huge losses to Sinopec Group and the decline in public confidence. This also caused a drop in its operating income.

On February 19, 2014, the Board of Directors of Sinopec Corp. approved the Proposal of Launching the Restructuring of Sinopec's Sales Business and the Introduction of Social and Private Capital to Realize Mixed Operation and agreed to audit the existing assets and liabilities of the Sinopec Oil Products Sales Business Segment. Based on evaluation, the reorganization was carried out. At the same time, social and private capital were introduced into shares to realize the mixed ownership operation. Sinopec Group's internal adjustment also caused instability in its own company, resulting in a decline in operating income.

Since 2015, Sinopec Group's operating profit has once again increased significantly. EAT and Earnings per share also have a significant increase. This is mainly because on February 6, 2015, the sixth inspection team of the CPC Central Committee pointed out the problems in the development of the Sinopec Group and aroused the attention of the government. The government gave Sinopec Group special technical and financial support. At the same time, the government hit the corruption in the Sinopec Group. Through these initiatives, Sinopec Group has regained goodwill, optimized its production structure and increased its production efficiency.

4.2 Financial Ratio Analysis

In Chapter 2, we have introduced Financial ratio analysis. It can be divided into 4 parts: Profitability analysis, the solvency ability analysis, the growth capacity ratio analysis and Turnover ratio analysis. Now I will use them to analysis Sinopec Group.

4.2.1 Profitability analysis

In Chapter 2, we introduced Profitability and its four indicators. We will now use these to analyze the Sinopec Group.

Table 4.8 Profitability ratio (in million RMB)

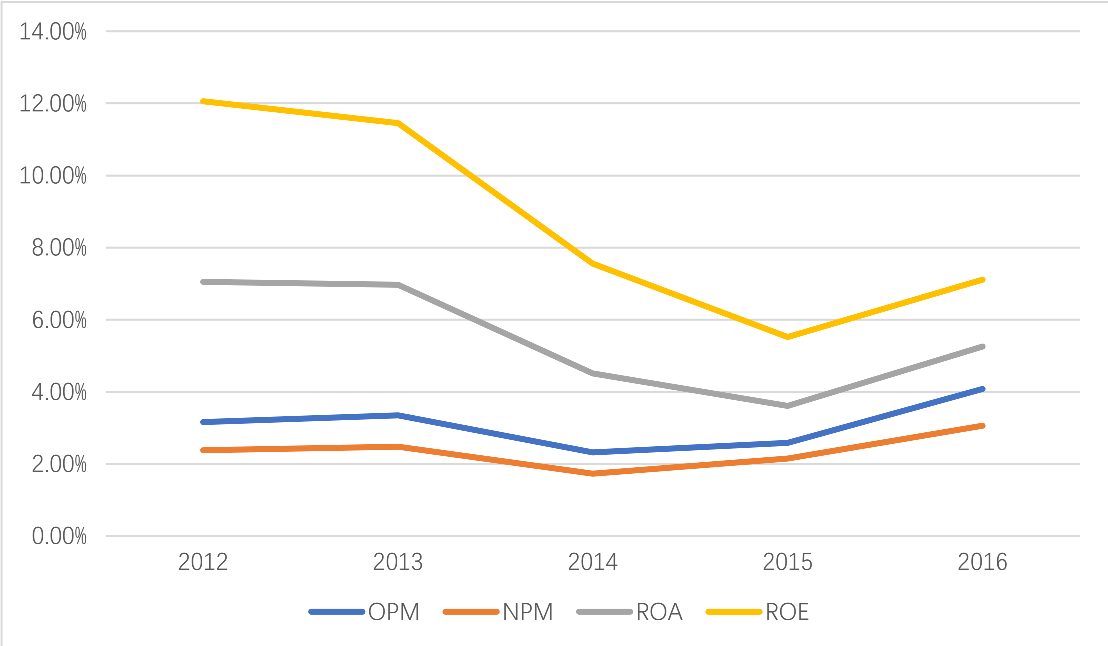
	2016	2015	2014	2013	2012
Operating profit margin	4.08%	2.58%	2.32%	3.35%	3.16%
Net profit margin	3.06%	2.15%	1.73%	2.48%	2.38%
Return on assets	5.26%	3.61%	4.51%	6.97%	7.05%
Return on equity	7.11%	5.52%	7.56%	11.45%	12.06%

Source: own calculation based on table 4.2

From the table 4.8, we can see that the operating profit margin and the Net profit margin are in a trend of rising first and then falling and then rising again between 2012 and 2016. Operating profit margin and Net profit margin changed little from 2012 to 2013 and they were within normal fluctuation range. Operating profit margin and Net profit margin fell sharply in 2014 and 2015. As mentioned above, the oil pipeline accident and sales restructuring in 2014 greatly affected the operating efficiency of the Sinopec Group, resulting in a decline in the operating profit margin and the Net profit margin. After 2015, the government's support plan brought new impetus to Sinopec Group. As a result, Operating profit margin and Net profit margin rebounded. During the period from 2012 to 2016, ROA and ROE also showed the same trend as Operating profit margin and Net profit margin. This shows that ROA and ROE are also affected by the oil pipeline accident and sales restructuring. During the period from 2014 to 2015, Sinopec Group's goodwill was reduced due to accidents, and sales restructuring also reduced work efficiency. This reduced Sinopec’s market share, reduced profits per unit of assets, and reduced returns to shareholders.

To make the changes of OPM, NPM, and ROA ROE clearer and easier to understand, Chart 4.3 has been drawn.

Chart 4.3 Trend of Profitability ratio



Source: own calculation based on table 4.8

4.2.2 Liquidity Ratio

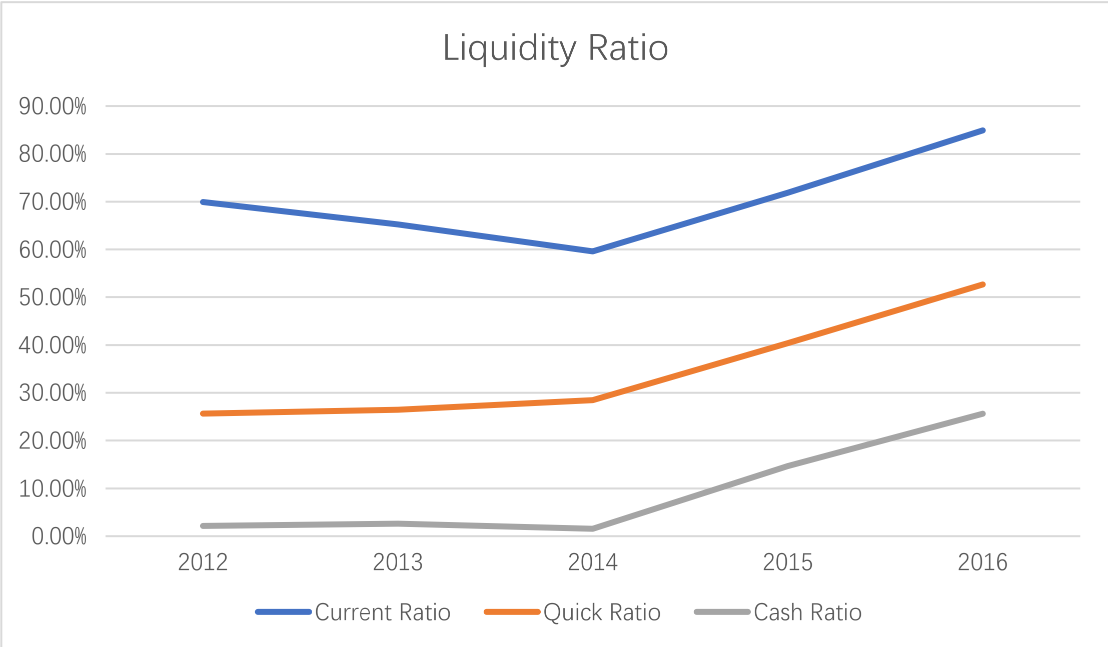
We introduced Liquidity Ratio in Chapter 2. It measures company´s ability to meets its immediate or short-term liabilities and obligations. In this part, I will use the three indicators mentioned in Chapter 2 to have an analyze.

Table 4.9 Liquidity Ratio (in million RMB)

	2016	2015	2014	2013	2012
Current ratio	84.91%	71.85%	59.6%	65.23%	69.91%
Quick ratio	52.67%	40.40%	28.45%	26.43%	25.65%
Cash ratio	25.63%	14.66%	1.55%	2.63%	2.12%

Source: own calculation based on table 4.1

Chart 4.4 Liquidity ratio



Source: own calculation based on table 4.9

From table 4.9 we can see that the Current Ratio shows a trend of falling first and then rising. In 2014, the Current Ratio reached its lowest point and began to rebound. This means that the Sinopec Group's short-term solvency also shows a tendency to decline first. Quick Ratio and Cash Ratio were basically in a stable state before 2014. However, it has grown significantly since 2014. This means that the liquidity of the Sinopec Group's liquid assets has improved significantly since 2014. The turning point of these changes occurred in 2014. In 2014, Sinopec Group agreed to restructure the existing assets and liabilities of Sinopec's oil sales business segment based on audits and evaluations. The restructured Sinopec Group increased the proportion of liquid assets.

However, the current ratio of Sinopec Group is between 65% and 85%, and it never exceeds 100% The Quick Ratio is between 25% and 53%. The Quick Ratio also does not exceed 100%. Generally, the current ratio should be above 200%, and the quick ratio should be above 100% is the normal enterprise standard. Although the operating conditions of different industries are different, the normal standards for the current ratio and quick ratio will be different, the Current Ratio and Quick Ratio of Sinopec Group are too low compared to other companies.

4.2.3 Solvency ratio analysis

The solvency ratio is the ratio of the security of the company's liabilities to the ability to repay the liabilities. The size of solvency largely reflects the degree of risk in the business operations.

4.2.3.1 Debt ratio

Debt ratio refers to the ratio of a company's total liabilities divided by total assets. In Chapter 2, we introduced its calculation formula. The following table shows the debt ratio calculated by formula. (2.15)

Table 4.10 Debt Ratio (in million RMB)

	2016	2015	2014	2013	2012
Total liabilities	66,608,400	65,750,600	80,427,300	75,965,600	69,667,000
Total assets	149,860,900	144,312,900	145,136,800	138,291,600	124,727,100
Debt ratio	44.45%	45.56%	55.41%	54.93%	55.86%

Source: own calculation based on table 4.1

We can see from table 4.10 Sinopec Group's Debt Ratio has always remained between 45% and 55%. Between 2012 and 2014, it was relatively stable, at about 55%. After 2014, Sinopec's Debt Ratio began to decline. From 2015 to 2016, the Sinopec Group's Debt Ratio remained at around 45%. This shows that the proportion of debt in Sinopec's assets has gradually become smaller. The reason for this change is the reduction in the proportion of liabilities in total assets in the asset restructuring conducted by Sinopec in 2014. The financial assistance given by the government in 2015 gave Sinopec a stronger debt reduction. The decline in Debt Ratio not only reduced Sinopec's interest expense, but also reduced the creditor's fear of debt risk.

4.2.3.2 Debt to equity ratio

Debt to equity ratio is a measure of the company's financial leverage, which shows the ratio of debt to equity in the company. Table 4.11 shows the indicators mentioned in Chapter 2

Table 4.11 Debt-to-equity ratio (in million RMB)

	2016	2015	2014	2013	2012
Total liabilities	66,608,400	65,750,600	80,427,300	75,965,600	69,667,000
Total equity	83,252,500	78,562,300	64,709,500	62,326,000	55,060,100
Debt-to-equity	80.01%	83.69%	124.29%	121.88%	126.53%

Source: own calculation based on table 4.1

From table 4.11, we can see that the Sinopec Group's debt to equity ratio has stabilized at over 120% before 2014. After the asset restructuring in 2014, it dropped to about 80 percent. In general, the lower the debt to equity ratio, the better. The lower the ratio, the smaller the company's debt to equity ratio. The higher the company’s ability to pay its debts. The rights of creditors can be better protected. Generally, the debt to equity ratio should be less than 1. The Sinopec Group's Debt to Equity Ratio is greater than 1 before 2014, which means that Sinopec Group has more debt than shareholders' equity during this period. It stands to reason that creditors will worry about it. However, because the Sinopec Group is a state-owned enterprise, the government will ensure that it will not go bankrupt. Therefore, after 2014, Sinopec expanded its shareholder equity through asset restructuring and reduced long-term liabilities, thereby reducing the debt to equity ratio and stabilizing it at around 80%.

4.2.3.3 Interest Coverage Ratio (ICR)

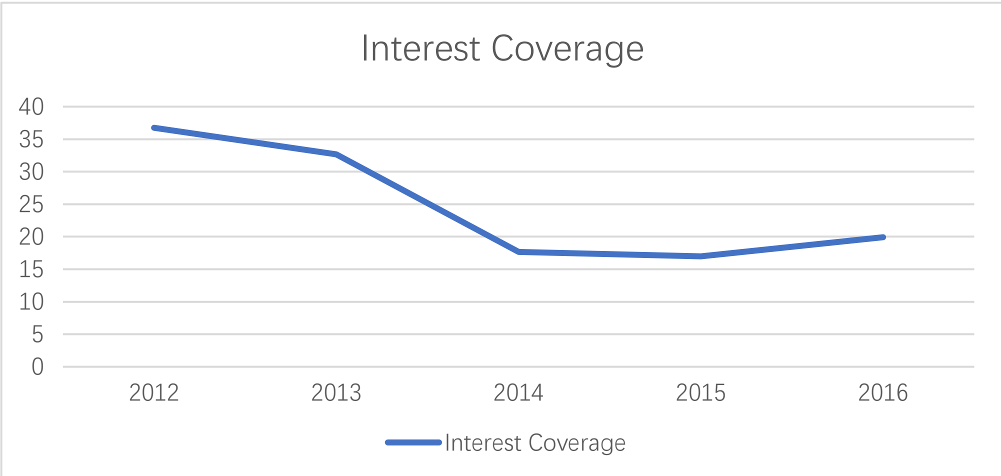
Interest Coverage Ratio refers to the ratio of the EBIT before the project can be used to pay interest during the loan repayment period to the current interest expense payable. Under normal circumstances, ICR>1 indicates that the company can repay interest; when ICR <1, it indicates that the company does not have enough funds to pay interest and the repayment risk is high.

Table 4.12 Interest Coverage Ratio (in million RMB)

	2016	2015	2014	2013	2012
EBIT	7,887,600	5,208,100	6,548,100	9,645,300	8,792,600
Interest paid	396,300	306,700	371,000	295,200	239,200
Interest coverage	19.90	16.98	17.65	32.67	36.75

Source: own calculation based on table 4.2

Chart 4.5 Interest Coverage



Source: own calculation based on table 4.12

As shown in table 4.12, the Sinopec Group's ICR is always greater than 1. This shows that Sinopec has ample pre-tax profit to pay interest. And we can still see that in 2014, the ICR has made great fluctuations. Asset reorganization still has a big impact on ICR values, but the overall momentum is slowly rising.

4.2.3.4 Activity ratio

Activity ratio refers to the degree of effectiveness of an enterprise's use of its assets. It reflects the turnover of the company's assets.

Table 4.13 Activity ratio

	2016	2015	2014	2013	2012
Account receivable	5,028,900	5,612,600	9,083,100	6,846,600	8,139,500
Revenues	193,091,100	201,888,300	282,591,400	28,8031,100	278,604,500
Cost of goods sold	185,203,500	196,680,200	276,043,300	278,385,800	269,811,900
Average inventories	21,083,950	22,008,400	20,506,450	16,686,050	15,100,450
Total assets	149,860,900	144,312,900	145,136,800	138,291,600	124,727,100
ACP	9.38	10.01	11.57	8.56	10.52
ART	38.40	35.97	31.11	42.07	34.23
IT	8.78	8.94	13.46	16.68	17.86
TAT	1.29	1.40	1.95	2.08	2.23

Source: own calculation based on table 4.1， 4.2

We can see from Table 4.13. The Sinopec Group's ACP has remained around 10 from 2012 to 2016 and is relatively stable. This means that it takes about 10 days for Sinopec Group to convert accounts receivable into cash. ART fluctuates greatly, but ART from 2012 to 2016 is above 30. This means that Sinopec’s accounts receivables can be paid in a timely and the possibility of bad debts is low. From 2012 to 2016, IT showed a trend of declining year by year. This shows that the ability of Sinopec Group's inventory to become cash has decreased. From 2014 to 2015, there was a huge drop in IT. This shows that Sinopec's structural reform has caused Sinopec's large inventory to be difficult to sell. TAT also shows a declining trend year by year. It means the revenue generated by assets has reduced. Sinopec Group's asset utilization efficiency is reduced.

4.3 DuPont Analysis

DuPont analysis uses the relationship between several major financial ratios to comprehensively analyze the financial status of a company. Using formulas 2.18, 2.19, we can analyze the Sinopec Group's data and obtained table 4.14.

Table 4.14 Pyramidal decomposition of ROE

	2016	2015	2014	2013	2012
Net profit margin	3.06%	2.15%	1.73%	2.48%	2.38%
Total assets turnover	1.29	1.40	1.95	2.08	2.23
Financial leverage	1.8	1.84	2.24	2.21	2.27
Return on equity	7.11%	5.52%	7.56%	11.45%	12.06%
Absolute change	0.0159	-0.0204	-0.0389	-0.0061	

Source: own calculation based on table 4.2

As shown in table 4.14, the absolute change in ROE from 2012 to 2015 is negative. This means that the ROE of the Sinopec Group is decreasing year by year from 2012 to 2015. The absolute change in 2016 ROE is positive. So next we use Method of gradual changes to analyze the reasons for this change

Method of gradual changes

The Method of gradual changes is a way to gradually analyze which indicator has a great influence on the result. Here, we assume that Net profit margin is a1, Total assets turnover is a2, and Financial leverage is a3. Analyze the effect of these indicators on ROE by the data in table 4.14.

Table 4.15 Gradual changes

		a_{2012}	a_{2013}	△a	△x a_i	Order
a_1	$\frac{\text{EAT}}{Revenues}$	0.0238	0.0248	0.001	0.0051	2
a_2	$\frac{\text{Revenues}}{Assets}$	2.23	2.08	-0.15	-0.0084	1
a_3	$\frac{\text{Assets}}{Equity}$	2.27	2.21	-0.06	-0.0031	3
Sum					-0.0065	

		a_{2013}	a_{2014}	△a	△x a_i	Order
a_1	$\frac{\text{EAT}}{Revenues}$	0.0248	0.0173	-0.0075	-0.0345	1
a_2	$\frac{\text{Revenues}}{Assets}$	2.08	1.95	-0.13	-0.0050	2
a_3	$\frac{\text{Assets}}{Equity}$	2.21	2.24	0.03	0.0010	3
Sum					-0.0385	

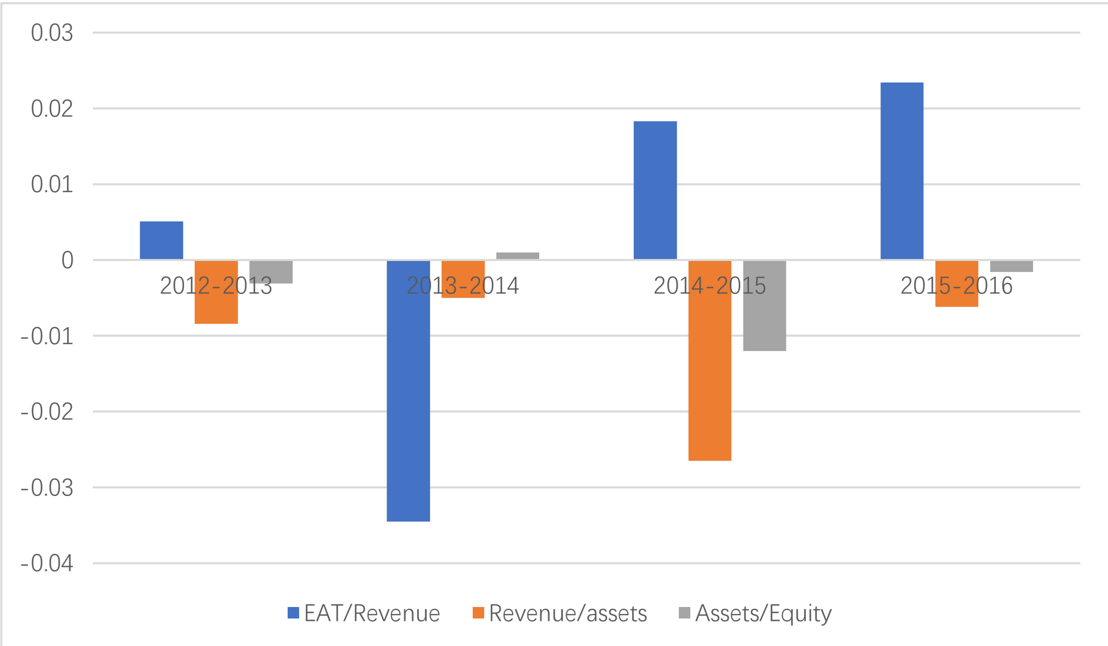
		a_{2014}	a_{2015}	△a	△x a_i	Order
a_1	$\frac{\text{EAT}}{Revenues}$	0.0173	0.0215	0.0042	0.0183	2
a_2	$\frac{\text{Revenues}}{Assets}$	1.95	1.40	-0.55	-0.0265	1
a_3	$\frac{\text{Assets}}{Equity}$	2.24	1.84	-0.4	-0.0120	3
Sum					-0.0202	

	a_{2015}	a_{2016}	△a	$△x\ a_i$	Order
a_1 $\frac{\text{EAT}}{\textit{Revenues}}$	0.0215	0.0306	0.0091	0.0234	1
a_2 $\frac{\text{Revenues}}{\textit{Assets}}$	1.40	1.29	-0.11	-0.0062	2
a_3 $\frac{\text{Assets}}{\textit{Equity}}$	1.84	1.80	-0.04	-0.0016	3
Sum				0.01566	

Source: own calculation based on table 4.14

Here, x is basic ratio, Δx is absolute change in the basic ratio, a is component ratio, Δa is absolute change in the component ratio,$\Delta x a_i$ is absolute change in the basic ratio caused by the change in the first component ratio

Chart 4.8 Gradual changes



Source: own calculation based on table 4.14

From the figure we can see that from 2012 to 2013, Total assets turnover has the greatest impact on ROE, while the impact of Total assets turnover is negative, so the total impact is negative. From 2013 to 2014, NPM had the greatest impact on ROE and NPM had negative impact, so ROE continued to decline. From 2014 to 2015, Total assets turnover had the greatest impact on ROE, and ROE continued to decline. From 2015 to 2016, although the impact of Total assets turnover and Financial leverage is still negative, the impact of NPM on ROE is positive, and the impact of NPM on ROE exceeds the impact of Total assets turnover and Financial leverage. From year to year 2016 ROE began to rebound.

5.Conclusion

In this Bachelor Thesis, we analyzed the operations of the Sinopec Group from 2012 to 2016. Sinopec Group is one of the largest oil companies in China and one of the top oil companies in the world. In this thesis, Common size analysis, Financial ratio analysis and DuPont analysis are used to analyze it.

In the Common size analysis, we found through Vertical analysis that the Sinopec Group have a big gap between Current Assets and Non-Current Assets. Non-Current Assets account for over half of the total assets. On the one hand, the special nature of oil companies requires Sinopec to have many equipment, transportation pipelines and other fixed assets. On the other hand, the special nature of state-owned enterprises also made Sinopec Group's demand for liquid assets small.

In the horizontal analysis, we discovered that Sinopec Group's operating profit suddenly dropped in 2014 by studying Sinopec's Income Statement. With 2014 as a point, many of Sinopec's indicators have undergone tremendous changes. This is because Sinopec reorganized its assets in 2014, which has a certain impact on the market share of Sinopec.

Through the analysis of the financial ratio, we can better understand the impact of asset reorganization on Sinopec. OPM, NPM, ROA, ROE fall almost in the same trend. This change shows that Sinopec’s operating profit has declined significantly. However, Sinopec Group has been affected by internal adjustments in terms of Debt ratio, Debt to equity ratio and Interest coverage ratio. However, the proportion of liabilities in total assets is relatively stable, and the ratio of debt and equity is also within an acceptable range. In other words, the Sinopec Group still has a good solvency ability. Activity ratio shows Sinopec Group has a strong ability to convert accounts receivable into cash. The turnover period and the number of turnovers are all at a very good level. Although both IT and TAT are declining, the overall level is still at an acceptable level.

From DuPont analysis point of view, NPM has always had a great impact on the changes in ROE. The biggest reason for ROE to recover from 2015 to 2016 is also caused by NPM. In other words, for Sinopec, the most important thing is still to regain market share after stability and increase operating income.

Overall, the Sinopec group's asset structure is extremely unbalance. Non-current assets account for a high proportion of total assets. Its liquidity is very poor. Although its profitability and solvency ability received a large impact on structural adjustments. However, they are still at an acceptable level. In my opinion, the asset structure of the Sinopec Group is influenced by the characteristics of the oil industry itself. It's hard to make a big difference. Sinopec Group should focus on increasing revenue in the future. On the one hand, Sinopec should rely on the huge scale to expanse and occupy lager market. On the other hand, Sinopec Group should carry out technological innovation to increase the added value of goods.

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List of Abbreviations

ACP	Average collection period
ART	Accounts receivable turnover
EAT	Earnings after taxes
EBT	Earnings before taxes
EBIT	Earnings before interest and taxes
IT	Inventory turnover
NPM	Net profit margin
OPM	Operating profit margin
ROA	Return on assets
ROE	Return on equity
TAT	Total assets turnover

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Ostrava dated 11.05.2018

金高阁 Jin Gaoge

List of Annexes

Annexes 1: Balance sheet of Sinopec Group from 2012-2016(in million RMB)

Reporting period	2016	2015	2014	2013	2012
Current assets					
Money funds	14,249,700	6,855,700	1,010,000	1,510,100	1,086,400
Bill receivable	1,319,700	1,094,900	1,396,300	2,877,100	2,004,500
Net bal of Account receivable	5,028,900	5,612,600	9,083,100	6,846,600	8,139,500
Prepayments	374,900	291,900	378,000	421,600	437,000
Net bal of other receivable	2,559,600	2,145,200	2,925,100	1,316,500	880,700
Inventories	15,651,100	14,549,800	18,822,300	22,190,600	2,182,6200
Other current assets	2,042,200	2,690,400	2,399,600	2,138,500	100,800
Total current assets	41,226,100	33,240,500	36,014,400	37,301,000	34,475,100
Non-current assets					
Available-for-sale securities	1,140,800	1,032,600	868,00		
Long-term equity investment	11,681,200	8,297,000	8,059,300	7,707,800	5,206,100
Tangible assets	69,059,400	73,257,700	70,348,500	66,959,500	58,896,900
Construction in progress	12,958,100	15,227,600	17,766,700	16,063,000	16,897,700
Intangible assets	8,502,300	8,108,100	7,868,100	6,026,300	4,983,400
Goodwill	635,300	6,27,100	628,100	625,500	625,700
Long-term deferred expenses	1,353,700	1,391,900	1,415,800	1,196,100	1,024,600
Deferred tax assets	721,400	746,900	697,900	414,100	1,513,000
Other non-current assets	2,582,600	2,383,500	2,251,200	1,998,300	1,104,600
Total non-current assets	108,634,800	111,072,400	109,122,400	100,990,600	90,252,000

Total assets	149,860,900	144,312,900	145,136,800	138,291,600	124,727,100
Current liabilities					
Short Term Loan	3,037,400	7,472,900	16,668,800	10,812,100	7,022,800
Bills payable	582,800	356,600	457,700	452,600	665,600
Accounts payable	17,430,100	13,044,600	19,836,600	20,272,400	21,562,800
Deposit received	9,592,800	9,264,900	8,991,800	8,107,900	6,929,900
Accrued payroll	161,800	118,500	83,900	81,800	183,800
Taxes payable	5,288,600	3,247,300	2,867,700	3,588,800	2,198,500
Other payables	7,963,600	8,631,700	10,330,200	8,291,700	6,172,100
Non-current liabilities due within one year	3,897,200	1,127,700	1,189,000	4,574,900	1,575,400
Short-term Debentures Payable	600,000	3,000,000		1,000,000	3,000,000
Total current liabilities	48,554,300	46,264,200	60,425,700	57,182,000	49,310,900
Non-current liabilities					
Long term loan	6,246,100	5,649,300	6,742,600	4,645,200	4,026,700
Bonds payable	5,498,500	8,325,300	8,350,600	9,913,800	12,184,900
Deferred Tax Liability	766,100	825,900	782,000	797,700	1,604,300
Other non-current liabilities	1,613,600	1,367,300	1,154,900	818,700	381,100
Total non-current liabilities	18,054,100	19,486,400	20,001,600	18,783,400	20,356,100
Total Liabilities	66,608,400	65,750,600	80,427,300	75,965,600	69,667,000
Owners' equity					
Paid-in capital (or share capital)	12,107,100	12,107,100	11,828,000	11,656,500	8,682,000
Capital reserve fund	11,952,500	11,940,800	4,870,300	3,941,300	3,057,400
Surplus Reserves	19,664,000	19,664,000	19,355,200	1,903,700	18,460,300

Retained Profits after appropriation	2,7516,300	24,562,300	24,071,800	22,453,400	20,944,600
Translation reserve				-205,900	-161,900
Total equity attributable to parent company's shareholders	71,223,200	67,537,000	59,448,300	5,7034,600	51,337,400
Total owner's equity	83,252,500	78,562,300	64,709,500	62,326,000	55,060,100
Debt and owner benefits in total	149,860,900	144,312,900	145,136,800	13,829,1600	124,727,100

Annexes 2: Income statement of Sinopec Group from 2012-2016(in million RMB)

	2016	2015	2014	2013	2012
Revenue	193,091,100	201,888,300	282,591,400	288,031,100	278,604,500
Operating income	193,091,100	201,888,300	282,591,400	288,031,100	278,604,500
Total operating costs	187,156,300	196,565,100	275,345,000	277,596,200	268,433,200
Operating cost	149,216,500	159,277,100	242,901,700	245,704,100	237,223,500
Sales Tax	23,200,600	23,634,300	19,120,200	19,067,200	18,848,300
Selling & Distribution expense	4,955,000	4,687,200	4,627,400	4,435,900	4,029,900
G&A expense	7,415,500	7,188,100	7,050,000	7,357,200	6,559,000
Finance expense	661,100	901,700	961,800	627,400	981,900
Asset impairment loss	1,707,600	876,700	683,900	404,400	790,600
The profit and losses on the changes in fair value	-21,600	73,500	-415,100	216,700	20,600
Investment income	3,077,900	857,300	813,700	251,000	154,000
Operating profit	7,887,600	5,208,100	6,548,100	9,645,300	8,792,600
Non-operating income	496,400	694,500	471,000	348,100	457,300
Non-operating expenses	396,300	306,700	371,000	295,200	239,200
The total profit	7,987,700	5,595,900	6,648,100	9,698,200	9,010,700
Income tax	2,070,700	1,261,300	1,757,100	2,560,500	2,369,600
Net profit	5,917,000	4,334,600	4,891,000	7,137,700	6,641,100
The retained profits belong to the parent company's owner	4,641,600	3,220,700	4,743,000	6,717,900	6,349,600
Minority shareholders' profit and loss	1,275,400	1,113,900	148,000	419,800	291,500
Earnings per share	0.3830	0.2660	0.4060	0.5790	0.7310

Annexes 3: Cash flow statement of Sinopec Group from 2012-2016(in million RMB)

	2016	2015	2014	2013	2012
Cash flow from operating activities					
Cash received from sales of goods or rendering services	216,369,500	230,518,300	312,912,300	321,496,200	322,017,800
Refunds of taxes	243,400	350,000	160,000	174,700	0
Cash received relating to other operating activities	7,743,600	8,563,500	4,421,400	2,239,600	1,786,400
Sub-total of cash inflows	224,356,500	239,431,800	317,493,700	323,910,500	323,855,100
Cash paid for goods or receiving services	154,786,800	173,083,900	258,964,900	269,149,500	272,503,400
Cash paid to and on behalf of employees	6,260,200	5,513,700	5,639,600	5,573,100	5,172,400
Tax payments	31,606,200	32,735,500	29,225,900	29,689,600	29,248,000
Cash paid relating to other operating activities	10,249,000	11,516,900	8,828,600	4,309,000	1,349,000
Sub-total of cash outflows	202,902,200	222,850,000	302,659,000	308,721,200	309,508,900
Net Cash Flow from Operating Activities	21,454,300	16,581,800	14,834,700	15,189,300	14,346,200
Cash Flow from Investing Activities					
Cash received from disposal of investments	3,148,900	335,300	387,400	419,800	138,400
Cash received from investments income	402,800	311,100	231,200	149,600	242,900
Cash received from disposal of subsidiary or other operating business units	44,000	45,400	102,000	155,000	32,500
Net cash received from disposal of subsidiaries and other business units	202,700	0	0	0	0
Cash received relating to other investing activities	291,400	612,600	206,600	249,900	125,400
Sub-total of cash inflows	4,089,800	1,304,400	927,200	974,300	1,026,200

Cash paid to acquire fixed assets, intangible assets and other long-term assets	7,284,700	10,265,700	12,438,100	15,494,600	15,814,800
Cash paid to acquire investments	1,638,900	2,333,200	1,385,500	3,348,700	1024,600
Acquisition of net cash paid by subsidiaries and other business units	0	8,900	253,200	0	0
Cash payments relating to other investing activities	1,787,900	391,800	113,700	5,000	0
Sub-total of cash outflows	10,711,500	12,999,600	14,190,500	18,848,300	17,354,100
Net cash flows from investing activities	-6,621,700	-11,695,200	-13,263,300	-17,874,000	-16,327,900
Cash Flow from Financing Activities:					
Cash received by investors	34,300	10,547,700	412,800	3,210,200	147,400
Subsidiaries absorb cash received from investments of minority shareholders	34,300	10,547,700	412,000	1,269,600	147,400
Cash received from borrowings	50,609,700	109,024,100	112,844,700	114,289,000	85,031,700
Cash received from issuance of bonds	0	0	0	0	8,000,000
Subtotal of cash inflows from financing activities	50,644,000	119,571,800	113,257,500	117,499,200	93,179,100
Repayments of borrowings	56,909,100	115,283,700	111,448,100	110,545,700	88,856,700
Dividends paid, profit distributed or interest paid	3,039,600	3,357,100	3,949,400	3,796,700	3,759,600
Dividends and profits paid by subsidiaries to minority shareholders	655,300	121,200	167,400	134,600	280,700
Cash payments relating to other financing activities	0	0	2,100	4,900	0
Subtotal of cash outflow from financing activities	59,948,700	118,640,800	115,399,600	114,347,300	92,616,300
Net cash flow from financing activities	-9,304,700	931,000	-2,142,100	3,151,900	562,800
Effect of Foreign Currency Translation	25,600	29,300	1,600	-8,200	-200

Net Increase (Decrease) in Cash and Cash Equivalents	5,553,500	5,846,900	-569,100	459,000	-1,419,100